# STRUCTURED ABSTRACT

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| TITLE OF THE ABSTRACT | : "Comparative Study of Serum Procalcitonin Level in STEMI Patients Undergoing Primary PTCA v/s Thrombolysis & to Correlate with In-hospital Outcomes" |
| KEYWORDS | : Procalcitonin, ST segment elevation myocardial infarction (STEMI), Primary PTCA, Thrombolysis, Cardiogenic shock |
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AIM / OBJECTIVES:

We sought to determine serum Procalcitonin (PCT) variation in two main strategies of reperfusion in STEMI; as well as, importance of PCT as a prognostic marker for various outcomes in STEMI.

MATERIAL AND METHODS:

This prospective observational study was planned to include consecutive STEMI patients undergoing primary PTCA or thrombolysis, in one of the largest tertiary care hospital in South India. Blood samples for measurement of PCT were collected at admission and at 24 hours post-admission. All the STEMI patients were treated as per standard protocol and guidelines. Statistical analysis was performed to determine serum PCT level variation in both the groups-

primary PTCA and thrombolysis. Additionally, the association between serum PCT level with various in-hospital outcomes was determined.

RESULTS:

Rise of PCT at 24 hours was significantly higher in thrombolytic group (median value- 0.1800 ng/ml) when compared to primary PTCA group (median value- 0.0930 ng/ml) with significant p-value of 0.008. Also, PCT level was significantly associated with cardiogenic shock (median value at 24 hours- 1.5 ng/ml) and it correlated with level of hsCRP. PCT level at 24 hours >0.3675 ng/ml showed 80% sensitivity and 81.3% specificity in prediction of in-hospital mortality. Higher level of PCT at 24 hours of admission was associated with lower left ventricular ejection fraction and it was statistically significant (p value of 0.036) with correlation coefficient (Spearman's rho) was -0.214. PCT level at 24 hours (median value= 0.36 ng/ml) was significantly associated with TIMI flow <3 (p value of 0.017).

CONCLUSIONS:

In patients of STEMI, systemic inflammatory response is better reflected by PCT; and it indirectly suggests that primary PTCA is associated with lesser systemic inflammatory activation in comparison to thrombolysis. It is also a potential marker of future risk prediction in STEMI.